#### A WATER BOTTLE HOLDER

BY

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# 5 BACKGROUND OF THE INVENTION

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The present invention relates to water bottle holder or a portable bottle carrier. More particularly, this invention relates to a portable bottle carrier that facilitates engaging and disengaging a bottle to and from the carrier, and allows the bottle to rotate 360° freely to enhance user convenience.

A disposable plastic water bottle (generally called a PET bottle) is widely used for outdoor activities such as climbing, fishing or picnic.

- 15 Many devices were developed for facilitating carrying the water bottle and drinking. Korean Utility Model No. 235219 ('219 hereinafter) discloses a water bottle carrier shown in FIG. 1, and Korean Utility Model No. 235800 ('800 hereinafter) discloses a PET bottle carrier shown in FIG.
  - 2. These devices solved inconveniences of carrying the bottle by hand, or carrying the bottle in hand baggage such as a backpack. However, '219 has a disadvantage that the water bottle carrier must be attached to a belt in pants, and '800 has a disadvantage that a belt must be taken out

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of pants in order to attach or detach the PET bottle carrier. Also, other bottle carriers by prior art have a disadvantage that a ring or a hook of the carrier is often disengages from a belt, or bands of a backpack, when the carrier is swung by bending or lateral body movement of a user.

### SUMMARY OF THE INVENTION

The present invention contrives to solve the 10 disadvantages of the prior art.

An objective of the invention is to provide a portable bottle carrier which can hold or release a water bottle in a simple and convenient way.

Another objective of the invention is to provide a portable bottle carrier which allows full rotation of a water bottle that is held by the carrier.

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Still another objective of the invention is to provide a portable bottle carrier that can be attached to any object that has a band, a hook or a ring.

To achieve the above objectives, according to the present invention, a portable bottle carrier for carrying a bottle that contains water or other drinks, includes a bottle-carrying ring that detachably holds the bottle, and a hook that attaches the portable bottle carrier to a wear

or a hand baggage of a user. The bottle-carrying ring includes an insertion opening into which the neck of the bottle is inserted, and a holding opening which holds the bottle. The size of the insertion opening is larger than the size of the holding opening, and the insertion opening is connected to the holding opening, so that the bottle can be inserted into the insertion opening and then move to the holding opening to be held securely by the holding opening.

The portable bottle carrier further includes a rotating member that connects between the hook and the bottle-carrying ring. The rotating member allows 360° rotation of the bottle-carrying ring with respect to the hook.

The hook is closable so that the hook is not releasable to any direction.

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The bottle-carrying ring further includes a through hole for connecting the bottle-carrying ring to the hook or to the rotating member, and the through hole is adjacent to the insertion opening.

The bottle-carrying ring is made of flexible material.

The insertion opening is connected to the holding opening via two projections. The distance between the two projections is smaller than the size of the holding opening by a predetermined length, so that the bottle can be

inserted into the holding opening or taken out of the holding opening by applying force greater than a predetermined value.

The advantages of the present invention are: (1) with

the portable bottle carrier of the present invention, when
doing outdoor activities such as climbing, fishing or
picnicking, a PET bottle can be easily attached to or
detached from anything that has a band, a hook or a ring,
in addition to a belt or a band of a backpack or other

bags; that is, a PET bottle may be carried very
conveniently; (2) the portable bottle carrier may be
attached to a belt using the closable hook without the need
of taking the belt out of pants; (3) the rotating member
provides additional convenience in handling the PET bottle.

Although the present invention is briefly summarized, the fuller understanding of the invention can be obtained by the following drawings, detailed description and appended claims.

### 20 DESCRIPTION OF THE FIGURES

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These and other features, aspects and advantages of the present invention will become better understood with reference to the accompanying drawings, wherein:

- FIG. 1 is a perspective view showing a water bottle carrier by prior art;
- FIG. 2 is a perspective view showing a PET bottle carrier by prior art;
- 5 FIG. 3 is a perspective view showing a portable bottle carrier according to the present invention;
  - FIG. 4 is an illustrative perspective view showing that a PET bottle is engaged with the portable bottle carrier;
- 10 FIG. 5 is a view to similar to FIG. 4 but showing that the portable bottle carrier is attached to a different position;
  - FIG. 6 is a perspective view showing a bottle-carrying ring according to the present invention;
- 15 FIG. 7 is a front elevation view of the bottle-carrying ring; and
  - FIG. 8 is a side elevation view of the bottle-carrying ring.

## 20 DETAILED DESCRIPTION OF THE INVENTION

FIGS. 3 - 5 show a portable bottle carrier 10 of the present invention. The portable bottle carrier 10 is used to carry a bottle 12 that contains water or other drinks. The portable bottle carrier 10 includes a bottle-carrying

ring 1 that detachably holds the bottle 12, and a hook 3 that attaches the portable bottle carrier 10 to a wear or a hand baggage of a user. The bottle 12 is generally made of clear plastic, and usually called a PET bottle. The bottle 12 usually has an annular projection 8 around its neck under its cap 7. The bottle-carrying ring 1 supports the annular projection 8 to hold the bottle 12.

As shown in FIGS. 6 - 8, the bottle-carrying ring 1 includes an insertion opening 5 into which the neck of the 10 bottle 12 is inserted, and a holding opening 6 which holds the bottle 12. The size of the insertion opening 5 is larger than the size of the holding opening 6, and the insertion opening 5 is connected to the holding opening 6, in a way that the bottle 12 can be inserted into the 15 insertion opening 5 and then move to the holding opening 6 to be held securely by the holding opening 6. The size of the insertion opening 5 is decided to allow the annular projection 8 is easily inserted without undue aligning efforts. The shape of the insertion opening 5 may be 20 circular, or any shape as far as the shape does not hinder easy insertion of the bottle 12 into the insertion opening 5. The holding opening 6 has a circular shape and a size that is less than the diameter of the annular projection 8 to hold the bottle 12 secure.

The portable bottle carrier 10 further includes a rotating member 2 that connects between the hook 3 and the bottle-carrying ring 1. The rotating member 2 allows 360° rotation of the bottle-carrying ring 1 with respect to the hook 3, which provides additional access convenience to the bottle 12 and natural positioning of the bottle 12 by gravity.

The hook 3 is closable so that the hook 3 is not releasable to any direction. Therefore, the portable bottle carrier 10 can be attached to any place that has a ring, band, and hook, etc. FIG. 4 shows that the portable bottle carrier 10 is attached to a belt, and FIG. 5 shows that the portable bottle carrier 10 is attached to a ring that is fixed to a band. In the embodiment shown, the hook 3 is similar to a carabiner that is used in rock climbing.

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The bottle-carrying ring 1 further includes a through hole 4 for connecting the bottle-carrying ring 1 to the hook 3 or to the rotating member 2, and the through hole 4 is adjacent to the insertion opening 5. Since the portable bottle carrier 10 is suspended from a point that the portable bottle carrier 10 is attached to, the holding opening 6 is positioned below the insertion opening 5 in service state. This facilitates the insertion of and securing the bottle 12 with help of gravity.

The bottle-carrying ring 1 is made of flexible material. The insertion opening 5 is connected to the holding opening 6 via two projections 20. The distance between the two projections 20 is smaller than the size of the holding opening 6 by a predetermined length, so that the bottle 12 can be inserted into the holding opening 6 or taken out of the holding opening 6 by applying force greater than a predetermined value. That is, when the user pulls the bottle 12 from the holding opening 6 to the 10 insertion hole 5 to drink water, the pulling force deforms the projections 20 slightly so that the neck of the bottle 12 can pass through the space between the projections 20. In a similar way, when the user inserts the bottle into the insertion opening 5 and then pushes the bottle 12 into the holding opening 6 to put the bottle 12 back, the pushing force deforms the projections 20 slightly so that the neck of the bottle 12 can pass through the space between the projections 20.

While the invention has been shown and described with reference to different embodiments thereof, it will be appreciated by those skilled in the art that variations in form, detail, compositions and operation may be made without departing from the spirit and scope of the invention as defined by the accompanying claims.